

adjusting for baseline factors (age, sex, race, region, metropolitan statistical area, family income, and health insurance coverage) using regression model statistics (adjusted R²). **RESULTS:** The overall prevalence of pediatric ADHD was 2.47% (n = 5.82 million). Most of the children were boys (68%), White (84%) and had private health insurance (62%). Overall mean annual expenditure was \$ 4145.87. Adjusted R² for the baseline model was 0.1130. When different comorbidity measures were added to the baseline model the adjusted R² increased to: 0.1230 (CIS), 0.1566 (D'Hooe version of CCI), 0.1534 (MECI), and 0.1372 (CDS-1). Among different combinations, a model consisting of patient baseline characteristics, MECI, and CIS explained the most variation in healthcare expenditure (adjusted R² = 0.1618). **CONCLUSIONS:** Models that include comorbidity and functional status measures performs best in risk adjusting health care expenditure in pediatric ADHD. There is a greater need to evaluate the use of CIS as a potential risk adjustment tool in mental and behavioral problems.

PMH5

ASSOCIATION BETWEEN SECOND GENERATION ANTIPSYCHOTICS AND CHANGES IN BODY MASS INDEX IN ADOLESCENTS

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OBJECTIVES: To assess the association of second-generation antipsychotics prescriptions (SGAs) with changes in body mass index (BMI) among adolescents compared to a randomly selected age and gender matched untreated comparison group. **METHODS:** A retrospective cohort study was conducted using an ambulatory electronic medical record database between January 2004 and July 2009. Antipsychotic naïve (no evidence of SGAs during 540 days pre index period) monotherapy adolescents 12–19 years with at least one prescription for any SGA during 395 days follow-up period were eligible. The comparison group without antipsychotic prescription was matched (3:1) to the antipsychotic group based on age, gender, and month of SGA. A maximum follow-up BMI 90 days post index date was evaluated and percentage change from baseline BMI was calculated. Multivariate linear regression was conducted to assess the percent change in follow-up BMI from baseline among antipsychotic users compared to the comparison group controlling for covariates. **RESULTS:** The mean age (15.35 years, SD 2.27) and gender (males, 53%) distribution among the antipsychotic group (n=793) was similar (p>0.05) to the comparison group (n=2,373). The mean percentage increase in follow-up BMI from baseline for antipsychotic group was significantly higher than the comparison group (p<0.01) except for ziprasidone (p>0.05). After adjusting for covariates, adolescents on olanzapine had the highest percentage increase in follow-up BMI from baseline (5.84%, 95% Confidence Interval [CI], 4.07–7.61) followed by aripiprazole (4.36%; 95% CI, 3.08–5.64), risperidone (3.65%; 95% CI, 2.61–4.68), and quetiapine (1.53%; 95% CI, 0.53–2.52) compared to the comparison group. Normal weight adolescents on antipsychotics had higher percentage increase in follow-up BMI from baseline compared to overweight or obese. **CONCLUSIONS:** Treatment with SGAs is associated with significant increase in BMI among adolescents relative to a matched comparison group. Interventions to control weight gain should be considered in adolescents treated with SGAs.

PMH6

THE IMPACT OF LONG-ACTING INJECTABLE VERSUS ORAL ANTIPSYCHOTICS ON HOSPITALIZATION RATES IN PATIENTS WITH SCHIZOPHRENIA: A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: To compare, by performing a meta-analysis, the impact of long-acting injectable antipsychotics (LAIs) versus oral atypical antipsychotics (OAs) on hospitalizations among schizophrenia patients. **METHODS:** Using the PubMed database and major psychiatric conference proceedings, a systematic literature review for January 2000 to June 2011 was performed to identify English-language studies evaluating schizophrenia patients treated with antipsychotics. Studies reporting hospitalization rates as a percentage of patients hospitalized or as the number of hospitalizations per person per year were selected. The primary endpoint for the meta-analysis was percentage decrease in hospitalization rates from baseline during treatment. Pooled treatment-effect estimates were calculated using random-effect models. Meta-regressions adjusted for study-level characteristics to account for the heterogeneity across studies. A sensitivity meta-regression analysis estimating the treatment effect on absolute hospitalization rates was also conducted. **RESULTS:** Fifty-three studies evaluating 81 treatment arms (LAIs = 15 arms, 5294 patients; OAs = 66 arms, 96,013 patients) were identified. Reduction in hospitalization rates for LAIs was 24.5 percentage points higher than for OAs (random-effect estimates: LAIs = 60.0% vs OAs = 35.5%, p = 0.018). Based on a meta-regression analysis, controlling for age, sex, refractory schizophrenia, and study characteristics, the adjusted percentage reduction in hospitalization rates for LAIs was 36.9 percentage points (adjusted estimates: LAIs = 66.4% vs. OAs = 29.5%, p = 0.024) higher than for OAs. The sensitivity analysis based on absolute hospitalization rates corroborated these findings (adjusted hospitalization rate during follow-up was 12.6% lower for LAIs than for OAs; adjusted estimates: LAIs = 13.7% vs. OAs = 26.2%, p = 0.033). **CONCLUSIONS:** Results of this meta-analysis suggest that LAIs significantly reduce hospitalization rates for schizophrenia patients compared to OAs.

PMH7

IMPACT OF LONG-ACTING INJECTABLE VERSUS ORAL ANTIPSYCHOTICS ON REHOSPITALIZATION RATES AND EMERGENCY ROOM VISITS AMONG RELAPSED SCHIZOPHRENIA PATIENTS

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OBJECTIVES: To compare the impact of switching to long-acting atypical antipsychotic therapy (LAT) versus continuing with oral antipsychotics (APs) on the recurrence of hospitalizations and emergency room (ER) visits among schizophrenia patients who relapsed. **METHODS:** Hospital discharge and billing records from the Premier Perspective™ Comparative Hospital Database (2006Q1–2010Q4) were analyzed. Adult patients receiving oral APs during a schizophrenia-related hospitalization were identified and further stratified upon their next schizophrenia-related rehospitalization (ie, relapse) into the following exposure groups: 1) patients switching to LAT (paliperidone palmitate or risperidone) versus 2) patients continuing with oral APs. LAT relapse patients were matched 1:3 with oral AP relapse patients using a propensity score model. The Andersen-Gill extension of the Cox proportional hazards model was used to assess the impact of LAT versus oral AP on time to multiple recurrences of hospitalizations and ER visits. **RESULTS:** A total of 1064 LAT patients were matched with 3015 oral AP patients. LAT and oral AP groups were well-balanced with respect to age (42.5 vs. 42.9 years, p=0.2859), gender (43.5% vs. 45.5% female, p=0.2429), race, region, payer, hospital characteristics, admitting diagnoses, physician specialty, and degree of illness severity (P>0.05 for all). Over a mean 30-month follow-up period, LAT patients were associated with significantly lower rates of all-cause rehospitalizations (1.27 vs. 1.61, p<0.0001) and ER visits (2.36 vs. 2.68, p=0.0195) compared with oral AP patients. Based on Andersen-Gill models, all-cause rehospitalization rates (hazard ratio [HR]=0.82, 95%CI: 0.77–0.87, p<0.0001) and ER visits (HR=0.89, 95%CI: 0.87–0.94, p<0.0001) were significantly lower for LAT than for oral AP. Consistently significant results were found when restricting to mental disorder-related events (rehospitalizations: HR=0.86, 95%CI: 0.80–0.92, p<0.0001; ER visits: HR=0.94, 95%CI: 0.89–0.99, p=0.042). **CONCLUSIONS:** This hospital database analysis found that in relapsing schizophrenia patients, LATs were associated with lower rehospitalization and ER-visit rates.

PMH8

LONG-TERM FOLLOW-UP EFFECTS OF COMPUTERIZED OR INTERNET-BASED COGNITIVE BEHAVIORAL THERAPY FOR DEPRESSION AND ANXIETY: A META-ANALYSIS

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OBJECTIVES: Internet/computer based Cognitive Behavioral Therapies (iCBT/cCBT) might serve as a cost-effective alternative to face-to-face psychotherapies. The purpose of this study was to synthesize the quantitative evidence from randomized clinical trials (RCTs) addressing the long term benefits of iCBT/cCBT for patients with depression and anxiety. **METHODS:** Previous studies published through November 2011 were retrieved from three electronic databases (Scopus, PubMed, PsycINFO). The inclusion criteria were English-language RCTs involving participants with major depressive disorder/depressive symptoms, generalized anxiety disorder, social phobia, and social anxiety disorder. The iCBT/cCBT interventions were compared to either some other treatment or to no-treatment control groups that were followed for >1 year. Standardized effect sizes (ES) were calculated from sample sizes, means and standard deviations for the primary outcome measure that was most closely related to the principal disorder. A random-effects model was used to calculate pooled effect sizes ES across the studies. Leave-one-out sensitivity analysis was also performed. **RESULTS:** Of the 769 articles identified, 82 were considered for full text retrieval and 10 met all inclusion criteria. The pooled mean ES from the ten different RCTs from 3 different continents showed no statistically significant difference when i-CBT/c-CBT was compared to active control [Effect Size (ES), - 0.10 , 95% Confidence Interval (CI), -0.21 to 0.01]. In contrast, results were significant when compared to placebo control (ES, -0.37, 95% CI: -0.70 to -0.05). No significant benefits for i-CBT/c-CBT in the long-term were found in the therapist supported subgroup. Results were robust when sensitivity analysis was performed. **CONCLUSIONS:** Evidence regarding the long term benefits of i-CBT/c-CBT for reducing depression and anxiety in adults are weak. Additional well-designed RCTs involving longer follow-up are needed in order to assess the long-term effectiveness of this intervention.

PMH9

DESCRIPTION OF THE BURDEN ASSOCIATED WITH COGNITION DEFICITS IN SCHIZOPHRENIA

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OBJECTIVES: Schizophrenia is often associated with cognitive deficits (CD). This covers diverse domains such as learning, memory and language. Cognitive skills are well-known predictors of social functioning, and knowledge of outcomes associated to CD is necessary to develop effective treatment strategies. The purpose of this study is to describe the schizophrenic population with CD. **METHODS:** We worked on data from the EuroSC cohort (N=288 in France, N=618 in Germany and N=302 in UK). Definition of CD was based on the cognition subscore of Positive and Negative Syndrome Scale (PANSS). Patients with a score lower than the median of the overall set were identified at baseline. As five assessments were performed over 2 years, pathways of patients with CD were explored. Bivariate analyses were conducted to compare patients with CD to others in terms of quality of life, functioning, side effects and depression. **RESULTS:** On the overall set, mean cognition subscore was 9.67 (SD=4.60, Me-